

By Katharina Boser
& Sarah Wayland

7 APPS THAT TEACH LITERACY SKILLS

Visual and sonic aids can help students with language disorders improve their reading, writing and speaking.

MOBILE DEVICES can help students who have trouble communicating orally by allowing them to converse using pictures and the written word (what's known as augmentative and alternative communication, or AAC). Any number of apps can facilitate AAC, but some of them are particularly well-suited for helping students with language disorders learn how to read and how to effectively express themselves in writing. Below, we review some exciting new features in seven apps that teach these skills.



VIZZLE

Vizzle's portal called Teach lets you organize, customize and launch interactive instructional academic lessons on the Vizzle Player (free in the App Store). Lessons can then be used on PCs, Macs, touchscreens, interactive whiteboards and within Player apps for Android tablets and iPads. Families, school staff and therapists who subscribe can share lessons and data on student progress. (Yearly rates start at less than \$500.) A shared library contains educator-approved audio, video, photos and line drawings that you can customize with appropriate behavioral supports to make it fun for students. These resources cover social skills lessons in addition to an array of academic subjects, many of which are aligned with the Common Core. The app has a visual schedule built in, with a timer in the corner to show how much time is left. Students can track their progress with

game boards that list their scores.

A new set of materials for teaching reading includes activities that break words down into letter and sound pairings, while also showing how to combine those sounds to form words. Additional activities reinforce word comprehension. Teachers can add a quiz to check that the student understands; Vizzle allows you to layer phonics, pop-ups and quizzes in whatever way works best for the child. The Phonics+ template is also great for teaching spelling or vocabulary words. You can use any list, from basic CVC words to SAT vocabulary, and set the lessons up to emphasize meaning, spelling or both.

Other new features include switch accessibility, with either automatic or two-step switch scanning; a redesign of the Build-a-Book application that allows you to record yourself reading a book so your student can listen and read at any time; and bigger audio and video buttons.

Calling All Tech-Savvy Districts!

10th
anniversary

Previous Charp Winners:

- 2005 Kiel Area School District (WI)
- 2006 Niles Township High School District (IL)
- 2007 Calcasieu Parish Public Schools (LA)
- 2008 Greenville City Schools (TN)
- 2009 Glen Cove School District (NY)
- 2010 Floydada Independent School District (TX)
- 2011 Vail School District (AZ)
- 2012 Mooresville Graded School District (NC)
- 2013 Rowan-Salisbury School System (NC)

Nominations are now open for the 2014 Sylvia Charp Award for District Innovation in technology! The Charp Awards celebrate school districts that have implemented effective & innovative district-wide technology programs.

Deadline is February 28

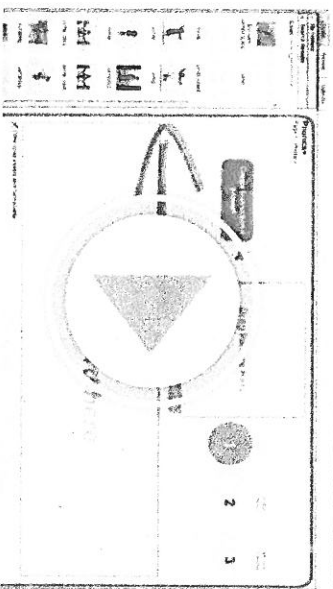
the
JOURNAL
ISTE

THEJournal.com/charpaward

Crack the Books

Crack the Books is a standards-based, core-curriculum-aligned digital book series, with both interactive elements and universal design accessibility features. Designed for students at all ability levels, the interactive books in the series can be adjusted for reading level, from first grade to eighth grade, so students in a class can experience the same content while reading at their ability level. These books include beautiful photographs; video footage; interesting facts; animations and images; and interactive charts, tables and globes. Comprehension supports are built into the text, along

NOW HEAR THIS



VIDEO: A video from VizZle walks educators through the process of creating an activity that teaches phonics.

with pop-up definitions for associated vocabulary. Users can adjust print size and customize voice-over options within the app to accommodate students with print disabilities or other limitations.

Currently, three books in the series include teacher resources with lesson plans, worksheets, activities and study guides. These titles, which cost \$9.99 each, are *Pines to Vines* (about forests), *Sea Shores to Sea Floors* (about oceans) and *Blades* (about grasslands). Books available without teacher resources include *Aquatic Earth*, *Cycles of Earth* and *Parched Planet*.

AutisMate

Designed as an AAC for students who have trouble with oral language, **AutisMate** (\$149.99 in the App Store) is an iPad app that offers a variety of visual supports, including visual scenes, visual schedules, video modeling, visual social stories and grid-based AAC. The app supports vocabularies ranging from simple to complex. While the visual schedules, video modeling and visual stories are all wonderful, we focus on communication skills, which are best improved using the Smart Scenes and Sentence Builder functions.

Sentence Builder uses grid displays that organize items by topics or by categories (such as people, places or animals); events and activities (such as birthday party,

opening presents or cooking dinner) or speech categories (such as nouns, verbs and locations). Users can build sentences using these grids; switching back and forth between different grids is easy. For younger kids, or those who find the grid displays confusing, **AutisMate** has Smart Scenes (visual scenes) where teachers or parents can take pictures of a child's environment and place labels within those scenes. Scenes can be shared via iTunes and e-mail. **AutisMate** is in the process of building an extensive crowdsourced content library with premade scenes that will be stored in the cloud so users will be able to sync data across multiple devices.

In addition, **AutisMate** now offers a predictive keyboard and text-to-speech capabilities; new symbols are easy to learn because the app pairs the symbols used in Sentence Builder with the predicted word.

Avaz

Avaz (\$99.99 in the App Store) is an iPad app for students who struggle to speak. It comes with 15,000 Symbolstix picture symbols and high-quality voice synthesis to help users create messages that can be read aloud or sent to others via e-mail, Facebook or Twitter. The picture symbols are color-coded and organized into linguistic categories. A user can choose from more than 80 topics sets, and a Core Words set is also available. **Avaz**

has some attention-grabbing features to help the user understand what they are doing, including icons that grow and then shrink in size when you tap on them. The app can also be set to say the selected word aloud before you move into the communication space.

Users can back up or synchronize vocabulary content on Dropbox. A search feature makes it easy to explore vocabulary words. By surrounding words with "conversation starters," users can quickly construct natural-sounding sentences; this also helps them learn how to effectively use such constructions.

Parents, teachers and clinicians can customize the app in a variety of ways by adding their own pictures to the picture symbol library, removing distracting content, controlling the picture grid size, controlling the speech output and using a high-contrast mode for students with poor vision. It comes with seven voices from Acapela, or you can record your own voice; you can even customize the pronunciation of unusual

words. Avaz tracks therapy sessions automatically, and can be set to send the data to a clinician or teacher for later review.

An integrated picture and keyboard mode allows students who are ready to transition to text to alternate between the two modes seamlessly. Avaz's keyboard has support for saving and loading words and phrases, a Quick Response bar for frequently used messages and a picture-assisted text prediction capability for sight readers.

Clicker Sentences and Clicker Docs

When students are ready to move from learning vocabulary to writing sentences, Clicker Sentences (\$28.99 in the App Store) and Clicker Docs (\$30.99 in the App Store) can enable them to produce work they can be proud of while learning the key skills necessary for independent writing.

Clicker Sentences allows clinicians, parents or teachers to create sentence-

January 20-23, 2015
GRANITE COUNTRY CONVENTION CENTER ORLANDO, FL

Mark your calendars and plan to join your peers and colleagues at **FETC 2015**. FETC is the continent's international conference that brings together education and technology leaders to exchange techniques and strategies for teaching and learning success. Fuel your inspiration for innovative teaching, and join the growing FETC community to connect, collaborate, create and improve teaching and learning in the 21st century!

Call for papers
opens March 2014

Information will
be available soon
at fetc.org!

INNOVATION RADIATES FROM FETC

PRODUCED BY
THE EDUCATION
TECHNOLOGY
GROUP

building activities using grids that contain the words required to build a sentence. Students tap words in the grid (a customized keyboard) to build sentences in the simple word processor, then hear each sentence automatically spoken aloud as they complete it, helping them identify any mistakes and make corrections. As the app reads the sentence, it highlights the currently spoken words by changing fonts, background color or text colors, depending on the user's preference. Learners can hear words before they write them to help them find the word they want. The app provides support for students at a range of levels. For example, in the early phases of learning to write sentences, students can see a completed sentence as a model that they can then copy. Later, the model sentence can be displayed in a pop-up that must be closed before they can continue.

Other options include an auditory model that requires the student to listen before writing and a guided-order activity for reinforcing left-to-right sentence construction in English. Users can add a picture to each sentence from a photo library or straight from the iPad camera.

The final product can be e-mailed or sent to any Air-Print compatible printer. A professionally curated learning resource bank offers a wide range of topic-specific Sentence Sets created by the curriculum team at the [LearningGrids](#) site.

Clicker Docs has many of the same features, but it is completely text-based. It includes a word predictor that suggests age-appropriate vocabulary based on the already-written part of the sentence, as well as a spell-checking functionality. Word Banks provide tabbed vocabulary support for a variety of topics. All of these features are completely speech supported. Teachers, clinicians and parents can customize the speed and voice of the text-to-speech, the word predictor level, and the contrast color schemes. Clicker Docs allows users to share Word Banks and documents across using Dropbox.

Abilipad

Abilipad (\$19.99 in the App Store) is an iPad app for taking notes, creating lesson plans, importing photos and designing customized keyboards. An integrated filing system allows user to create folders to manage their notepads and keyboards. You can create customized keyboard layouts by assigning a letter, word, sentence or picture to each key, as well as an audio recording that plays when the key is pressed. The user can select the font and letter size displayed on the keyboard and can color-code each key. The keyboards are switch accessible.

The Adaptive Notepad provides a distraction-free writing space where you can compose messages. You can also add stock images or your own pictures into your notes.

The app also includes a spell-checker and word prediction capabilities to help users with word-retrieval challenges. Users can set the font, size and color of the text as well as the background color of their notes. The Adaptive Notepad allows users to use any keyboard they wish. Abilipad gives students the ability to read letters, words or sentences in their messages with text-to-speech as they compose using one of the 20 Acapela voices. The speaking rate is adjustable, and the words are highlighted as they are spoken.

The Adaptive Notepad lets you add or duplicate pages, reorder them and organize them into folders. You can e-mail text and images from a note. An extensive library lets you share keyboards, lessons and activities from others, so you don't have to reinvent the wheel.

Katharina I. Boser is the author of [Apps for Autism](#), a review site. She is a technology coordinator at the **Glenig Country School** and co-editor, with Sarah Wayland, of the book *Technology Tools for Students with Autism: Innovations that Enhance Independence and Learning*.

Sarah Wayland is an RDI consultant-in-training and a special needs care coordinator at [Guiding Exceptional Parents](#).

The Digital Divide Hits Home

With more and more students using mobile devices for learning, districts are finding creative ways to provide enough bandwidth for everyone to do their work outside of school.

The Internet has reached virtually every American school, but problems of bandwidth and connectivity persist. Despite more than 17 years of government subsidy via E-rate and this month's pledge from the FCC to add \$2 billion in funding, a recent Consortium for School Networking (CoSN) survey revealed that a whopping 99 percent of districts still "needed more bandwidth."

Rich Kaestner, project director for Washington, DC-based CoSN, attributed the bandwidth shortfall to a need to feed the digital beast. Digital curricula, 1-to-1 programs, BYOT initiatives and Common Core textbooks are driving a growing crowd of students and teachers online, both at school and at home. The big equity question of today is this: What can districts do about those homes that don't have Internet connectivity?

"A Big Distance for a Little Money"

In the rural areas of America, bandwidth problems revolve around price and availability. According to Kaestner, "Providers are not anxious to cover rural areas, because it's a big distance for a little money. To make it worthwhile,

providers have to charge more, or have some sort of incentive to provide service."

While the E-rate program has helped to bridge this financial gap, John Harrington, CEO of Funds For Learning, believes that the program must adjust to changing times and burgeoning need. In 2013, Funds For Learning estimates that 8,169 rural school districts applied for E-rate funds. These applicants represent an enrollment of 11.77 million students at 33,693 school sites. Harrington said, "The challenge that rural schools (and every

school that receives E-rate funding) are facing is that the program has not been adjusted significantly since its inception. We've seen the demand for Internet access triple, while the program itself has only increased about five percent in terms of funding support."

According to Harrington, many rural schools are looking to expand bandwidth by installing fiber optics, either between buildings or across parts of the community. "They have to negotiate right of way, or even crossing railroad



shutterstock.com

tracks," he said. "That's where it takes a lot of work and leadership in the local community. It may take five years. In many cases, the community may look to bond funds or other sources in addition to the E-rate program to get that funding in place."

E-Rate Doesn't Hit Home

Cell phone data plans, apps for tablets and home Internet access capabilities have changed radically since